

Notes on the Capture Period of the Tiger Quoll (*Dasyurus maculatus*) in Victoria

BY IAN MANSERGH*

Abstract

Over 90% of Tiger Quolls (*Dasyurus maculatus*) captured in Victoria are male and over 80% of these are taken between May-August. Capture appears to be related to an increase in activity of the males during the breeding season as is the case in other *Dasyurus* sp.

Introduction

The Tiger Quoll or Tiger Cat (*Dasyurus maculatus*) is the largest marsupial carnivore surviving on mainland Australia and is a rare species in Victoria. At present the species is not the subject of a wide range of research effort (e.g. Areher 1982) although Mansergh (in press) describes, from the historical record, the distribution, abundance and status of the species in Victoria. Since more information about this species has been called for (Ahern 1982), data derived from Victorian records providing the season of capture and an interesting propensity for males of the species to be captured are presented below.

Methods

Records of the Tiger Quoll in Victoria, made before December 1981, were extracted from the literature (175 references), records of the Fisheries and Wildlife Division, the depository museums of each Australian state, the British Museum, the Department of Crown Lands and Survey and the Royal Zoological Gardens (Melbourne). These records were examined for references to captured animals (i.e. sightings were excluded), the sex of the animals and period of capture was noted from these records.

Results

Two hundred and forty records of the

Tiger Quoll were examined and 52% of the records were of captured animals, of these approximately two-thirds were trapped, less than 10% were shot or poisoned near farm buildings whilst the remainder were taken by unspecified means. One hundred and four capture records gave the month of capture and 95% of these recorded the sex of the captured animal (Fig. 1), whilst 20 records of either male or unsexed animals provided the season of capture only. These data are presented in Figure 1, which also shows the mating season of the species in Victoria (Fleay 1940).

Discussion

Data presented in Figure 1 show that there is a propensity for captured Tiger Quolls to be male and to be taken between May-August. The sex ratio (1 female:11 males) of captured Tiger Quolls is not explained by the probable sex ratio of the population, i.e. Fleay (1940) noted a ratio of captive bred lit-

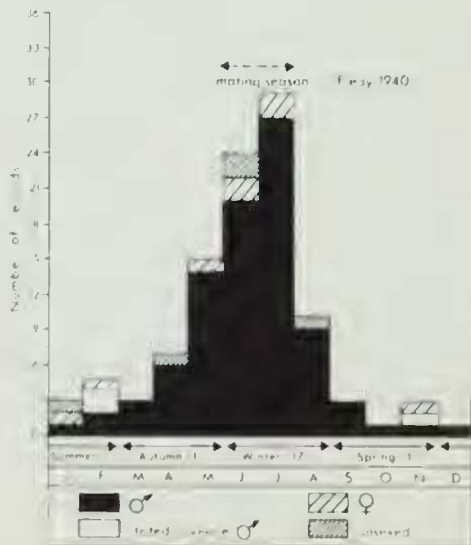


Fig. 1. Month of capture and sex of Tiger Quolls (*D. maculatus*) taken in Victoria.

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ters of 1:1.5 whilst Settle (1978) noted 1:1. The sex ratio of the captured population and the period of capture suggests that capture is related to an increased activity of males during the breeding season. A higher trapping success for the male Northern Quoll (*D. hallucatus*) during the breeding season has been noted (Begg 1981) whilst Godsell (1982) recorded an increase in the number of transient males during the breeding season of the Eastern Quoll (*D. viverrinus*).

Acknowledgements

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The Derrinal Permian Glacial Valley Part 3

BY FRANK ROBBINS

The Moorabbee Cliffs Area — see Fig 7 and Fig 2

The best time to visit this interesting area is when the lake-level is at its lowest in autumn or winter, before the heavy rains have started. Access is by sealed road to Moorabbee Caravan Park. Toilets and picnic tables are available.

The lowest levels reached to date were 185.5m. (608.63 ft) on 3.5.1968 and 186.7m (612.5 ft) A.S.L. on 16.5.78. Erosion by the waves since filling of the reservoir in 1963 has uncovered a remarkable complex of glacial tillite, conglomerate, sandstone, erratics etc. below the full supply level (F.S.L.) or 194.2m or 637 ft A.S.L. The best places to inspect these are along the Pt Patterson (Beacon Pt) beach, or the Moorabbee Bluff, the steep cliff area below the "round-about" or toilets, take care — it is very dangerous in places.

The *main features* in this Moorabbee area are:-

(a) a thick flat-lying glacial sandstone occupying most of the grassed area above F.S.L.

(b) an upper tillite member only evident at the "effluent dam" on the crest, and the cuttings on the access road.

(c) a complex much *distorted glacial series* below F.S.L.

(d) four interglacial pavements within (a) pointing to at least three advances and retreats of the ice, i.e. multiple advance and retreat.

(e) *minor features*, such as boulder pavement, erratics striated in situ, rippled sandstone, strange "pot-hole concretionary" structures.

(f) Patterson home ruins and grave dated 1852.

General structure and interpretation — rather difficult to unravel, but it seems reasonable to conclude this area including the Farley's eastern area could be an over-deepened section of the glacial valley, and from time to time the terminal or end-moraine of the Permian ice flow i.e. its furthest northern reach. There must be at least 60m (200 ft) thickness of beds, which includes flat-lying glacial sandstone. This was quarried to build the Patterson home — the "ruins" now protected by a high wire fence. The nearby Patterson grave with its recently restored marble headstone gives a date of

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